(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property **Organization**

International Bureau



(43) International Publication Date 10 November 2005 (10.11.2005)

PCT

(10) International Publication Number WO 2005/105381 A2

(51) International Patent Classification7: 23/18, 23/00

B25B 13/14,

(21) International Application Number:

PCT/US2005/014107

(22) International Filing Date: 26 April 2005 (26.04.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 10/832,464

27 April 2004 (27.04.2004)

(71) Applicant (for all designated States except US): AD-OPTICAL TECHNOLOGIES. [US/US]; 2579 John Milton Drive, Suite 105-PMB 237, Herndon, VA 20171 (US).

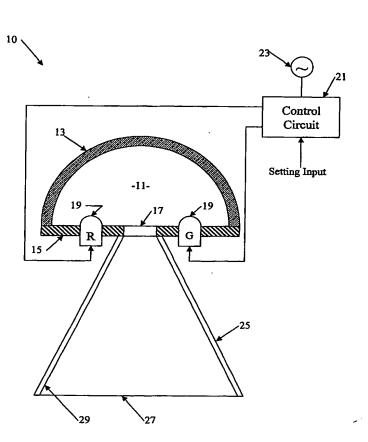
(72) Inventors; and

(75) Inventors/Applicants (for US only): RAINS, Jack, C., Jr. [US/US]; 2946 Timber Wood Way, Oak Hill, VA 20171 (US). BROWN, Matthew [US/US]; 3132 Chepstow Lane. Falls Church, VA 22042 (US). BATES, Christopher [US/US]; 13149 Rounding Run Circle, Oak Hill, VA 20171 (US).

- (74) Agent: GEORGE, Keith, E.; McDermott Will & Emery LLP, 600 13th Street, NW, Washington, DC 20005-3096
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA. MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA. ZM. ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: PRECISE REPEATABLE SETTING OF COLOR CHARACTERISTICS FOR LIGHTING APPLICATIONS



(57) Abstract: A desired color of illumination of a subject is achieved by determining settings for color inputs and applying those setting to one or more systems that generate and mix colors of light, so as to provide combined light of the desired character. In the examples of appropriate systems, an optical integrating cavity diffusely reflects light of three or more colors, and combined light emerging from an aperture of the cavity illuminates the subject. System settings for amounts of the different colors of the input lights are easily recorded for reuse or for transfer and use in other systems.

WO 2005/105381 A2

] (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937) (1937)

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.